FAIRBURY WATER DEPT.

- 1887 Fairbury Water works was installed, it consisted of a 25' deep by 25' diameter open well, a wooden elevated tank and tower and about 3300 feet of 8" main water line. Water was pumped by a steam pump to the distribution system + tanks.
- 1892 the dug well was abandoned and a new well was drilled at a depth of 2,000 ft.
- 1898 Two collecting reservoirs were built
- 1899 a new wooden tank was built on a brick tower
- 1913 this tank was replaced by a steel one
- 1916 Well no. 2 was drilled to a depth of 2172 ft.
- 1926 Well no 3 was drilled to a depth of 1586 ft.
- 1935 a new plant was built at our present site + still being used
- 1935 well no 1 at the water plant was drilled at a depth of 39 ft.
- 1935 well no 2 " " " " " 40 ft.

NOTE: The water was very hard so the plant was built to utilize lime, soda ash and alum to soften the water. It had a mixing basin, settling basin, two sand filters and a clear well (storage tank under ground of 80,000 gal. water) and 2 high service pumps to pump water to town.

- 1960 Well no 3 was drilled at a depth of 57 ft.
- 1969 Our present plant was built.

The water goes through an aerator to take out the hydrogen sulfite gas and iron. Then through chemical feeder lime, soda ash and alum. Upflow Clarifier to mix the chemicals and settle them out to soften the water. A Carbon Dioxide contact tube to recarbonate the water and adjust the P.H. of the water so that it will not over coat or leave a film

on your piping or make it agressive and actually eat the piping up. We then add chlorine to disinfect the water, Fluoride for dental care, and Polyphosphate to control ~~flow~~ film build up on our sand medias.
We now have 6 gravity sand filters to take any carry over fine dirt & We have a new clear well (storage tank at the plant underground) that holds 282,000 gal. of water. 3 high service pumps to pump water to town + the water tower. The water entering the plant is around 450 PPM of hardness or 30 grains. after treatment it ranges from 80 to 140 PPM or 8 grains of hardness. The plant maximum design is 950 Gallons per minute. Our average pumpage for the year is 345 gal./minute. The plant is operated and manned 24 hr./day every day.

- 1948 our present tower was built, the ball is 32 feet in diameter and 31 feet tall for water storage. The over all height is 118 feet from ground to top of tower. The tower holds 150,000 gallons of water. it basically is for water pressure so we can maintain around 50 Pounds of pressure to everyone and for a reserve for fire protection.
Not all the water goes to the tower first. Most of the lines are looped (tied together) so if there is a demand the water will go down that line and not to the tower. The tower is drained some every day and refilled in the evening.

- This system requires a Class A certified person by the Ill. E.P.A. to operate. Presently we have Lucy McPherson and Duane Ufft as class A operators. Tyler is the

highest certification in the State of all.

- Presently we serve around 1,478 properties
  " " " " 3,643 people.
- We have 162 Fire Hydrants
  We pumped 139,156,000 gal. to town 199.
  ~~The~~ The average consumption 104 ~~gal/person/day~~
  We metered 113,652,300 gal 1992
  The average consumption* 85 gal/person/day

*note 25,503,700 used for ~~the~~ Fires and ow loss due to main breaks + leaks.

- Ow new construction we are required to pressure test all new lines and send in bacteral samples + pass them before we can put this line in service.
- The Federal E.P.A. + ILL. EPA require an system testing program. (note inset)

  Page 1 - bacteria sampling 1 time/month
  Fluoride " " "

  Page 2 - NITRATE'S 4 Times/year/QTR

  Page 3- A. INORGANIC COMPOUNDS " " "
  the occur naturally most of the time

  B. Synthetic compound 4 times/year/QTR.
  these are pesticides + farm chemicals

  C. Volital compounds 4 times/year/Qtr.
  these are chemicals used.

  Page 4. Distribution samples to check for chemicals in our treated water if present.

- ~~The~~ Next year the ~~for~~ Federal E.P.A. will require 25 more new chemicals added to our list beside the present ones we have to test for.

Fairbury has won several Floride awards for maintaining a level of ~~1.2 PPM 0.8 to~~ 0.8 PPM to 1.2 PPM of Floride in our system. as noted by the test we are not in violation of any chemical or bacterial limits. ~~Do~~ Do you think our water is safe, after looking at all the testing we have to do?

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY MICROBIOLOGICAL ANALYSIS REPORT FORM

DIVISION OF PUBLIC WATER SUPPLIES

Samples must reach lab within 30 Hours after collection.

Public Water Supply Name:

County:

Facility Number:

1-TIME/MONTH SEND IN 6 SAMPLE FOR ANY BACTERIA PRIMARY IS FECAL

Date and Time in Laboratory:

Mail Report To:

ame

ddress

ost Office: State: Zip Code:

5. Date Collected:

6. Sample Collector:

7. Sample purpose:
☐ Routine ☐ New Construction - Permit No._____ FY19____
☐ Check sample ☐ Replacement ☐ Other_____

OLLECTOR: Fill in shaded area only. Type or use black ball point pen. See verse side for explanations and instructions.

8. Contact person for unsatisfactory samples:
Name: Phone Number:

This Agency is authorized to require information under ILLINOIS REVISED STATUTES, 1979, Chapter 111½, Sec. 1019. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 and an additional civil penalty up to $1,000.00 for each day the failure continues, a fine up to $1,000.00 and imprisonment up to one year This form has been approved by the Forms Management Center.

Bacteriological Samples (Glass Bottles)

ottle umber	Sampling Point	Sample Type	Time Collected	Res. Cl	11 Sample Amt	11 Col-onies Read	12 Total Coliform per 100 ml (by MF)	13 Opinion	14 Laboratory number

Routine chemical samples (Plastic Bottles)

ple ype or D	Sampling Point	15 Alkalinity P	15 Alkalinity Total	16. Hardness	17 pH	18. Iron	19 Nitrate	20.

ported by Date:

Completed report must be retained for minimum of 5 years.

-IEPA Use Only-

WS Notification for Unsatisfactory Results

rson Notified: Date:

1- FLUORIDE/MONTH

of Bottles Sent _____

e Bottles Sent _____

ason for Replacement:

) Samples more than 30 hrs. old

) No Date/Time of Collection

) Other _____

532 – 0123

(2)

4-TIMES / yr

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B400445
SAMPLING POINT DESC. : FAIRBURY

SUBMITTING SOURCE # : 105035C01 SITE # :
DATE COLLECTED : 940111 TIME COLLECTED : 0CC0 SAMPLING PROGRAM : NN

COLLECTED BY : LEROY MCPHERSON DELIVERED BY : MAIL
COMMENTS :
FUNDING CODE : PW32 AGENCY ROUTING : 00 UNIT CODE :
SAM TYPE CODE : FPWS SAMPLE PURPOSE CODE : 1 REPORTING INDICATOR : 8

DATE RECEIVED : 940112 TIME RECEIVED : 1000 RECEIVED BY : PMD
LAB OBSERVATIONS : TRIP BL SAM# :
SUPERVISORS INITIALS : RPF NOTE : K = LESS THAN VALUE

P00630 NITRATE&NO2-NTOTAL MG/L : 0.1K P00615 NITRITE-N MG/L : 0.1K
P00620 NITRATE-N MG/L : 0.1K

(3) A. Inorganics

4-TIMES/Yr. B. Synthetic

SOC's

Required IOCs

Fed. Regulated Phase II & IIb IOC Element	Storet No.
Barium	01007
Cadmium	01027
Chromium	01034
Fluoride	00951
Mercury	71900
Selenium	01147

Fed. Unreg. Ph. II , Reg. V , Prop. IOC Element	Storet No.
Antimony	01268
Beryllium	01012
Cyanide	00720
Nickel	01067
Sulfate	00945
Thallium	01324

C, Volatile

VOC's

1. Phase I Regulated Chemicals Parameter
Benzene
Carbon Tetrachloride
1,2-Dichloroethane
1,1-Dichloroethlyene
para-Dichlorobenzene
1,1,1-Trichloroethane
Trichloroethlyene
Vinyl Chloride
2. Phase II Regulated Chemicals
Chlorobenzene
o-Dichlorobenzene
cis-1,2-Dichloroethylene
trans-1,2-Dichloroethylene
1,2-Dichloropropane
Ethylbenzene
Styrene
Tetrachloroethylene
Toluene
Total Xylene
3. Phase V Regulated Chemicals
Dichloromethane
1,1,2-Trichloroethane
1,2,4-Trichlorobenzene

1. Phase II Regulated Chemicals Parameter
Alachlor
Aldrin^^
Atrazine
Carbofuran
Chlordane
DDT^^
1,2-Dibromo-3-chloropropane (DBCP)
2,4-Dichloro-Phenoxyacetic Acid (2,4-D)
Dieldrin^^
Endrin^^
Ethylene Dibromide (EDB)
Heptachlor
Heptachlor Epoxide
Lindane
Methoxychlor
Pentachlorophenol (PCP)
Polychlorinated Biphenyls (PCB's)
Toxaphene
2,4,5-TP (Silvex)
2. Phase V Regulated SOCs (Phase II Unregulated SOCs) Parameter
Aldicarb^
Aldicarb Sulfone^
Aldicarb Sulfoxide^
Benzo(A)Pyrene
Dalapon
Di(2-Ethylhexyl)Adipate
Di(2-Ethylhexyl)Phthalate
Dinoseb
Diquat
Endothall
Glyphosate
Hexachlorobenzene
Hexachlorocyclopentadiene
Oxamyl (Vydate)
Picloram
Simazine
2,3,7,8-TCDD (Dioxin)
3. Additional Phase II Unregulated Chemicals Parameter
Butachlor
Carbaryl
Dicamba
3-Hydroxycarbofuran
Methomyl
Metolachlor
Metribuzin
Propachlor